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<140> US 10/037,311

<141> 2001-11-09

<150> US60/117,555

<151> 1999-01-28

<160> 17

<170> PatentIn version 3.1

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His Pro Ser Asp Ser Asn Arg Ile Met Gly Phe Ala Glu Ala Arg Val  
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TECH CENTER 1600/2900

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Arg Cys Gly Pro Gly Thr Glu Ser Tyr Lys Lys Ala Leu Lys Gln Leu  
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Asp Gln Glu His Ile Asp Gly Asp Gly Glu Cys Lys Tyr Val Val Trp  
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Ile Ser Phe Ser Gly Leu Gly Asn Arg Ile Leu Ser Leu Ala Ser Val  
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Val Asp Met Ser Leu Leu Gly Gly Leu Leu Val Ser Gly Phe Lys Lys  
 65 70 75 80

Glu Ser Cys Leu Ser Arg Tyr Gln Ser Tyr Leu Tyr Arg Lys Ala Ser  
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Pro Tyr Lys Pro Ser Leu Leu Leu Ser Lys Leu Arg Ala Tyr Glu Glu  
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Leu His Lys Arg Cys Gly Pro Gly Thr Arg Gln Tyr Thr Asn Ala Glu  
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Ser Ile Ala Ser Val Phe Leu Tyr Ala Met Leu Thr Asp Arg Val Leu  
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Leu Val Glu Gly Gly Glu Gln Phe Ala Asp Leu Phe Cys Glu Pro Phe  
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Leu Asp Thr Thr Trp Leu Leu Pro Lys Asp Phe Thr Leu Ala Ser Gln  
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Phe Ser Gly Phe Gly Gln Asn Ser Ala His Cys His Gly Asp Met Leu  
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Lys Arg Lys Leu Ile Asn Glu Ser Ser Val Ser Ser Leu Ser His Leu  
 225 230 235 240



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Cys	Glu	Glu	Asp 260	Gln	Asn	Leu	Leu	Lys 265	Asn	Val	Pro	Trp	Leu 270	Ile	Met
Arg	Thr	Asn 275	Asn	Phe	Phe	Ala	Pro 280	Ser	Leu	Phe	Leu	Ile 285	Ser	Ser	Phe
Glu	Glu 290	Glu	Leu	Gly	Met	Met 295	Phe	Pro	Glu	Lys	Gly 300	Thr	Val	Phe	His
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Ile	Thr	Arg	Tyr	Tyr 325	Gln	Ala	Tyr	Leu	Ala 330	Lys	Ala	Asp	Glu	Arg 335	Ile
Gly	Leu	Gln	Ile 340	Arg	Val	Phe	Asp	Glu 345	Lys	Ser	Gly	Val	Ser 350	Pro	Arg
Val	Thr	Lys 355	Gln	Ile	Ile	Ser	Cys 360	Val	Gln	Asn	Glu	Asn 365	Leu	Leu	Pro
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Leu 385	Lys	Leu	Lys	Ser	Val 390	Leu	Val	Thr	Ser	Leu 395	Thr	Thr	Gly	Tyr	Phe 400
Glu	Ile	Leu	Lys	Thr 405	Met	Tyr	Trp	Glu	Asn 410	Pro	Thr	Val	Thr	Arg 415	Asp
Val	Ile	Gly	Ile 420	His	Gln	Pro	Ser	His 425	Glu	Gly	His	Gln	Gln 430	Thr	Glu
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Leu	Thr 450	Asp	Lys	Leu	Val	Ile 455	Ser	Ala	Trp	Ser	Thr 460	Phe	Gly	Tyr	Val
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Asn	Gln	Thr	Asn	Pro 485	Asn	Pro	Pro	Cys	Gly 490	Arg	Ala	Met	Ser	Pro 495	Asp
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Xaa His Leu Ser Lys Ala Asp Xaa Arg Leu Gly Ile Gln Ile Arg Val  
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ggttgtagat atgtaatatg gttganttcc aatggtgatc ttgggaatag gatgctgagt	180
ctagctttcan ctttncttta tgctctctta acaaataagg tttnacttgt cgaactagga	240
gttgacatgg ctgatctttt ctncgagcca tttccaaaca ctacttggtt tcttcccca	300
gagtttccgc tcaacagcca cttcaacgag caagtctctt tctaacggaa attnttggca	360
accccgatgg gttcataatc gnncatgtag ttccgtnatt cccagtgncc aacaaaaagc	420
ttttnttttt tgnnaggnta gccaaagtttt tttnggggaa accccctggt tgtcttaaaa	480
ncgggtagnt tttttttccc aacttttttt na	512

<210> 9

<211> 668

<212> DNA

<213> Arabidopsis thaliana

<400> 9

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tctgttggtg aatgcagata cattgtgtgg attgctgttt atgggctagg aaacagaata	120
cttactcttg cttctctggt tctctatgct ctcttgactg acagaatcat gcttggtgac	180
caacgtacgg acataagtga cctcttctgt gagccttttc cagggtacttc ctgggtactc	240
cctctggatt ttccactaac agatcaatta gatagcttca acaaggaatc tccgcgctgt	300



## MS00-001C2 XFTASE

tacggaacaa tgttgaagaa tcatgccatt aactcaacta caacagaaag catcatcccc	360
tcgtacctct gtctttatct tattcacgat tacgacgatt atgataagat gttcttctgt	420
gaaagtgacc aaattctcat caggcaagtc ccttggttgg tcttcaactc gaatctttac	480
tttatcccat ctctatggtt gatcccttct tttcagtcag aattaagcaa gctattccca	540
cagaaagaaa ccgtctttca ccatttggtt cgctatcttt ttcacccgac taaccaagtt	600
tggggcatga tcacaagatc ctataatggg tatttatcaa gagctgatga gagacttggg	660
attcaagt	668

&lt;210&gt; 10

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Arabidopsis thaliana

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atcataaaac tttcttgtat cgcaagcctt caccatacaa gccgtctgaa tatcttgtct	180
cgaagcttag aagctatgag atgcttcaca aacgttgcgg tccagggaca aaagcttaca	240
aggaagcaac aaagcatctt agtcatgatg agaattataa tgcaagcaaa tcagatggtg	300
aatgccgata cgttgtgtgg ctcgctgatt acgggcttgg aaaccgacta ctcactcttg	360
cttctgtgtt cctctacgct ctcttgactg atagaatcat tcttggtgac aaccgcaagg	420
atattggtga tctcttatgc gagccatttc caggctcttc atggttgctt cctctcgact	480
ttccattgat gaaatatgct gatggatacc acaagggata ctctcgttgt tacggaacaa	540
tgttgaaaaa tcattccatc aactcgactt cattcccgcc acatctatat aggcataacc	600
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acaaagtccc t	671

&lt;210&gt; 11

&lt;211&gt; 785

&lt;212&gt; DNA

&lt;213&gt; Arabidopsis thaliana

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tcgttcccac gatcctcaca atgccttnen agaggaaacta ccttcccgga gttagtcccc      180
cattcggggtt cacatccatg agacggaaga gtaagggtgac natgggtccat cgacgtggat      240
tgaatacnct gtggatcagg agctgtacga cctgctggct gataaagtaa ccatggcctt      300
aatcctccaa gaatatgagc aacatatacn aatgtagacc ttgcacttgt gactatttta      360
tcagttagac ttagaagata cntctcggcg agcgcctttt ggtcgtgtan cttcttgtct      420
tntgttgaac cttttctcca cttggctgat naacttcaat gatctcccct gctgaactcg      480
gtcgttccca atacatgttc tntaaggtna cagagtactc tggatacnaa gatgtgacna      540
gaacagctnt aagtgtctgg cttcttgaat atatgacttt tggctcttct tgtgcacctt      600
gttcaggcaa aaggctcttc ttctgtcca acttacaact tgatccttnn cctgttaana      660
tttccccctc gaatgctgaa ctaccccttc tctaataacc nncctctcct ccgctcctga      720
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MS00-001C2 XFTASE

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ttgactgaga gaatcattct tgttgacaac cgcaaggatg ttagtgatct cttatgtgag 180  
ccatttccag gtacttcatg gttgcttccg cttgactttc caatgctgaa ttatacttat 240  
gcttatggct acaataagga atacctcggt gttacngtac aatggttgaa aatcatgcc 300  
tcaactcgac ttcaattccg ccacatctat atctccataa catccatgaa tctaggata 360  
ntgataagct gttcttctgc caaaanggat caaagttttt tatcgacana tttccatggg 420  
taaattaatt canaaccaat gccttacttt ggttcccaat ctttatgggc tgaaatccca 480  
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<211> 290

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tttccaaaca ctacttggtt tctcccccca gagtttccgc tcaacagcca cttcaacgag 180  
cagtctcttc tacgcaattc tggcaaccgc atggttgcat atcgacatgt agttcgtgaa 240  
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<210> 14

<211> 207

<212> DNA

<213> Arabidopsis thaliana

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MS00-001C2 XFTASE

ttagtctatc ccgccccggt gtttcggatt cgtctgaaca tataacaaaa aaaaagggtca	180
aaaggagaat tctttgagct aacaatg	207

<210> 15  
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&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (81)..(81)

&lt;223&gt; "n" is A, C, G, or T

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (87)..(87)

&lt;223&gt; "n" is A, C, G, or T

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (98)..(98)

&lt;223&gt; "n" is A, C, G, or T

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (118)..(118)

&lt;223&gt; "n" is A, C, G, or T

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gactacaagg cttccaaaaa cccccngnga acntggaant taagaganca tggctgagat	180
ataccttctg agttgttctg atgcncctgg ggtcacaggt ttatggctct cactcgtgga	240
ggttgcctca tggccttgga gggttgaagc catngngtgtt gaacaaagct gagaatggga	300
ctgcccatga gccttactgt gtgaaagcaa gatcaataga gccctgttcc caagcgacat	360
tgttccatgg ctgtaaagat tgaaacatga atagagtctc gagggccttt tttgccttta	420
atagatgttg tacgggtcaag aatttcagag ttgcccaata gacacgtaag gaatattagg	480
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MS00-001C2 XFTASE

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<400> 16

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 1 5 10

<210> 17  
 <211> 8  
 <212> PRT  
 <213> Cross-species

<400> 17

Asp Glu Lys Phe Glu Gln Asp Gln  
 1 5